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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/650,285	08/28/2003	Joseph R. Zelinski	1063	6688	
7590 04/13/2006			EXAMINER		
Donald J. Ersler			SAN MARTIN, EDGARDO		
725 Garvens Av Brookfield, WI		ART UNIT	PAPER NUMBER		
Brookiioia, ***			2837		
		DATE MAILED: 04/13/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Applicati	on No.	Applicant(s)				
Office Action Summary		10/650,2	35	ZELINSKI, JOSEPH R.				
		Examine	<del></del>	Art Unit				
		Edgardo S	San Martin	2837				
The MAILIN Period for Reply	G DATE of this communication	appears on the	e cover sheet with the c	orrespondence ad	ddress			
WHICHEVER IS L - Extensions of time may after SIX (6) MONTHS: - If NO period for reply is - Failure to reply within th Any reply received by th	TATUTORY PERIOD FOR REDNIES ONGER, FROM THE MAILING be available under the provisions of 37 CF from the mailing date of this communication specified above, the maximum statutory period for reply will, by see Office later than three months after the restment. See 37 CFR 1.704(b).	G DATE OF THE R 1.136(a). In no even. eriod will apply and wetatute, cause the app	HIS COMMUNICATION ent, however, may a reply be time till expire SIX (6) MONTHS from lication to become ABANDONE	N. nely filed the mailing date of this o D (35 U.S.C. § 133).	•			
Status								
1) Responsive	to communication(s) filed on <u>2</u>	26 January 200	<b>6</b> .					
2a)⊠ This action is		This action is n						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims	<b>3</b>							
4)⊠ Claim(s) <u>1-2</u> 4a) Of the ab 5)□ Claim(s) 6)⊠ Claim(s) <u>1-9</u> 7)⊠ Claim(s) <u>10,</u>	1 and 30-42 is/are pending in too ove claim(s) is/are with	drawn from co	nsideration.					
Application Papers 9)☐ The specifica	tion is objected to by the Exan	niner						
	s) filed on is/are: a)		objected to by the E	Examiner.				
	not request that any objection to							
Replacement	drawing sheet(s) including the co	rrection is require	ed if the drawing(s) is obj	ected to. See 37 CF	FR 1.121(d).			
11)☐ The oath or d	eclaration is objected to by the	e Examiner. No	te the attached Office	Action or form PT	TO-152.			
Priority under 35 U.S.	C. § 119							
a) All b) s  1. Certifie  2. Certifie  3. Copies  applica	nent is made of a claim for fore Some * c) None of: ed copies of the priority docume ed copies of the priority docume s of the certified copies of the pation from the International But ed detailed Office action for a	nents have bee nents have bee priority docume reau (PCT Rule	n received. n received in Application ents have been receive e 17.2(a)).	on No d in this National	Stage			
Attachment(s)	Cited (PTO-802)		4) Tatoniou Summon	(DTO 442)				
<ol> <li>Notice of References</li> <li>Draftspersor</li> </ol>	cited (P10-892) i's Patent Drawing Review (PTO-948)	)	4) Interview Summary ( Paper No(s)/Mail Da	•				
3) Information Disclosure Paper No(s)/Mail Date	Statement(s) (PTO-1449 or PTO/SB	3/08) 	5) Notice of Informal Pa	atent Application (PTC	)-152)			

### **DETAILED ACTION**

Page 2

## **Double Patenting**

1. Applicant is advised that should claim 30 be found allowable, claim 42 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1 9, 11, 30 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malkiewicz (US 3,724,591) in view of Herold (US 5,949,035).

With respect to claims 1, 2, 30 and 42, Malkiewicz teach a method of forming a muffler with a baffle (Figs.1 – 4), comprising the steps of providing a single piece of material (Fig.3); forming a baffle portion (Fig.3, Item 27), wrapping a remaining portion of the single piece of material around the baffle portion (Figs.1 and 2), attaching the single piece of material to itself (Fig.4, Item 93) to form a container portion; forming at least one inlet (Fig.1, Item 15) and at least one outlet (Fig.1, Item 17) in the container

Art Unit: 2837

portion; securing the baffle portion to the container portion; and covering each end of the container portion by attaching end caps (Fig.1, Items 13), and further comprising the step of providing the container portion with one of a round and a square cross section (Figs.1 – 4; Col.1, Line 39 Col.3, Line 50). However, Malkiewicz fails to disclose the baffle portion having at least two legs, adjacent legs of the at least two legs being oriented at an acute angle to each other out of the single piece of material.

On the other hand, Herold teaches a muffler comprising a baffle portion (Figs. 1 and 2, Item 18) having at least two legs (Fig.2, Items 18, 20 and 22), adjacent legs of the at least two legs being oriented at an acute angle to each other (Fig.2) out of the single piece of material (Fig.1)(Col.5, Lines 34 – 56).

It would have been obvious to a person with ordinary skill in the art at the time of the invention was made to employ the Herold baffle portion configuration with the Malkiewicz design because it would provide with a baffle portion that would provide a multiplicity of resonating chamber that could be tuned to attenuate different noise frequencies, improving the efficiency of the muffler by providing a wider range of frequencies to be attenuate by the muffler.

With respect to claims 3 and 4, Herold teaches forming at least one first exhaust opening (Fig.2, Item 166) through a first leg (Fig.2, Item 18) and forming at least one second exhaust opening (Fig.2, item 170) through a second leg of the baffle (Fig.2, Item 20), and further comprising the step of forming at least one third exhaust opening (Fig.2, Item 168) through a third leg of the baffle (Fig.2, Item 22)(Col.9, Lines 4 – 7).

Art Unit: 2837

With respect to claim 5, the Examiner considers that it would have been an obvious matter of design choice to form at least one fourth exhaust opening through a third or fourth leg of the baffle, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

With respect to claim 6, Malkiewicz teaches further comprising the step of forming least one inlet opening (Fig.1, Item 15) through the container, attaching at least one inlet tube (Fig.1, Item 16) to the at least one inlet opening, forming at least one outlet opening (Fig.1, Item 17) through the container, attaching at least one outlet tube (Fig.1, Item 18) to the at least one outlet opening.

With respect to claims 7 and 8, Malkiewicz teaches inserting the at least one inlet tube (Fig.1, Item 16) through the baffle portion and inserting the at least one outlet tube (Fig.1, item 18) through the baffle portion, or inserting the at least one inlet tube partially through the baffle portion and inserting the at least one outlet tube through the baffle (Fig.1)(Col.2, Lines 45 – 56).

With respect to claim 9, the Examiner considers that it is well known in the art of acoustics in muffler applications to insert at least one baffle tube through at least two of the at least two legs and inserting at least one resonator tube in at least one of the at least two legs, in order to tune the muffler to attenuate a certain frequency range. The Examiner considers that any person with ordinary skill in the art would acknowledge that in a muffler with plural chambers and passages, a way of tuning the muffler is by altering the manner in which the chambers communicate with each other; these is a

Art Unit: 2837

mere design choice to comply with a particular design parameter, this limitation would not depart from the scope of Malkiewicz and Herold teachings.

With respect to claim 11, Herold teaches further comprising the step of forming a web area (Fig.2, Items 138 and 140; Col.8, Lines 34 – 36) between adjacent legs of the at least two legs.

3. Claims 12 – 19, 21, 31 – 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malkiewicz (US 3,724,591) in view of Herold (US 5,949,035), and further in view of Musitano et al. (US 4,133,479).

With respect to claims 12, 31 and 32, Malkiewicz and Herold teach the limitations discussed in a previous rejection, but fail to disclose wherein an inlet axis of the at least one inlet having an angular relationship to an outlet axis of the at least one outlet.

Nevertheless, Musitano et al. teach a muffler comprising at least one inlet (Fig.5, Item 36) and at least one outlet (Fig.5, item 23) wherein an inlet axis of the at least one inlet having an angular relationship to an outlet axis of the at least one outlet (Fig.5).

It would have been obvious to a person with ordinary skill in the art at the time of the invention was made to employ the Musitano et al. inlet-outlet axis angular relationship with the Malkiewicz and Herold design because the examiner considers that it would have been an obvious matter of design choice, in order to comply with design's space constraints, in addition, it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

With respect to claims 13, 14, 33 and 34, Herold teaches forming at least one first exhaust opening (Fig.2, Item 166) through a first leg (Fig.2, Item 18) and forming at

Art Unit: 2837

least one second exhaust opening (Fig.2, item 170) through a second leg of the baffle (Fig.2, Item 20), and further comprising the step of forming at least one third exhaust opening (Fig.2, Item 168) through a third leg of the baffle (Fig.2, Item 22)(Col.9, Lines 4 – 7).

With respect to claims 15 and 35, the Examiner considers that it would have been an obvious matter of design choice to form at least one fourth exhaust opening through a third or fourth leg of the baffle, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

With respect to claims 16 and 36, Malkiewicz teaches further comprising the step of forming least one inlet opening (Fig.1, Item 15) through the container, attaching at least one inlet tube (Fig.1, Item 16) to the at least one inlet opening, forming at least one outlet opening (Fig.1, Item 17) through the container, attaching at least one outlet tube (Fig.1, Item 18) to the at least one outlet opening.

With respect to claims 17, 18, 37 and 38, Malkiewicz teaches inserting the at least one inlet tube (Fig.1, Item 16) through the baffle portion and inserting the at least one outlet tube (Fig.1, item 18) through the baffle portion, or inserting the at least one inlet tube partially through the baffle portion and inserting the at least one outlet tube through the baffle (Fig.1)(Col.2, Lines 45 – 56).

With respect to claims 19 and 39, the Examiner considers that it is well known in the art of acoustics in muffler applications to insert at least one baffle tube through at least two of the at least two legs and inserting at least one resonator tube in at least one

Art Unit: 2837

of the at least two legs, in order to tune the muffler to attenuate a certain frequency range. The Examiner considers that any person with ordinary skill in the art would acknowledge that in a muffler with plural chambers and passages, a way of tuning the muffler is by altering the manner in which the chambers communicate with each other; these is a mere design choice to comply with a particular design parameter, this limitation would not depart from the scope of Malkiewicz and Herold teachings.

With respect to claims 21 and 41, Herold teaches further comprising the step of forming a web area (Fig.2, Items 138 and 140; Col.8, Lines 34 – 36) between adjacent legs of the at least two legs.

## Allowable Subject Matter

4. Claims 10, 20 and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Response to Arguments

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. The Examiner considers that the obvious combination of the patents to Malkiewicz, Herold and Musitano et al. teach the limitations described in the claims, as discussed above.

### **Conclusion**

Page 8

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### **Contact Information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edgardo San Martin whose telephone number is (571) 272-2074. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (571) 272-2800 ext.33. The fax phone

Application/Control Number: 10/650,285 Page 9

Art Unit: 2837

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edgardo San Martín Primary Examiner

Art Unit 2837 Class 181 April 10, 2006